Tárgy neve: Map projections 2.

Tárgyfelelős neve: Dr. Kerkovits Krisztián
Tárgyfelelős tudományos fokozata: PhD
Tárgyfelelős MAB szerinti akkreditációs státusza: AT

Az oktatás célja:
a, knowledge
- Complex knowledge of the general geographical, cartographic, planning, mathematical and informatic principles, rules, relationships required for the practice of geoinformatics
- Knowledge of the current theories, models and literature of geoinformatics based on scientific results. He/she is aware of the possible development directions and limits of the field of geoinformatics.
- In his/her native language, he/she confidently uses the conceptual system and terminology describing natural processes and can adapt it to the conceptual framework of geoinformatics.
b, abilities
- Ability to interpret complex professional problems in the field of geoinformatics, to explore the necessary theoretical and practical background and to solve problems.
- Ability to initiate cooperation with design and development professionals and end users of geoinformatics results.
- Ability to use the professional vocabulary of geoinformatics in his/her mother tongue and English.
c, attitude
- Monitors professional and technological developments in the field of geoinformatics and the labour market trends.
- Committed to adhering to and making others adhere to quality requirements.
d, autonomy and responsibility
- Independence regarding the thorough examination and elaboration of professional issues and processes.
- Feels responsible for meeting and making others meet the deadlines. He/she is responsible for his/her work and for his/her co-workers' work in projects.
- With his/her knowledge and skills of geoinformatics, he/she cooperates responsibly with professionals in other fields.

Az oktatás tartalma:

- Classification of non-conical projections, selecting a map projection
- Pseudocylindrical projections: Apian I, II, sinusoidal
- Eckert projections, polyhedric, Robinson, Ginzburg VIII, loximutal
- Auxiliary latitude: Mollweide
- Wagner transform: Kavrayskiy VI, VII.
- Compound projections: Goode, Érdi-Krausz, Baranyi II, IV.
- Pseudoconic & pseudoazimuthal projections: Bonne, Ginzburg III.
- Polyconic projections: ordinary, War Office, equal-area
- Pseudopolyconic projections: Lagrange, Nicolosi, Van der Grinten I, Ginzburg IV–VII.
- Modified azimuthal projections: Aitoff, Hammer, Winkel III, Raisz, retroazimuthal
- Special projections: conformal non-conical projections, polyhedral projections
- Identification of a map projection, optimalizaton of map distortions

A számonkérés és értékelés rendszere: oral and/or written exam.

Kötelező irodalom:

- Snyder, J. P.: Map projections: A working manual U. S. Government Printing Office. Washington D.C. 397 p., 1987 ISBN: 9781782662228
- Fenna, D.: Cartographic Science: A Compendium of Map Projections, with Derivations. CRC Press. Boca Raton, FL. 504 p, 2007 ISBN: 9780849381690

Ajánlott irodalom

- Snyder, J. P.; Voxland, P. M.: An album of map projections. U. S. Government Printing Office. Washington D.C. 249 p. 1989 DOI: 10.3133/pp1453
- Grafarend, E. W., Krumm, F. W.: Map Projections: Cartographic Information Systems. Springer. Berlin. 714 p. 2006 ISBN: 9783540367024